

HOW I DO IT

Protection of Marginal Mandibular Nerve During Neck Dissection

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The marginal mandibular branch, which is the nerve supplying the muscles of the lower lip, emerges at the lower border of the parotid gland and crosses the inferior border of the mandible to reach the face beyond the anterior border of the masseter muscle, crossing the facial artery and vein (Fig. 1A). More often than not, damage to this nerve during a neck dissection is observed postoperatively in the form of weakness of the muscles of the lower lip, although the surgeon intraoperatively would have successfully demonstrated the nerve. This is mainly because of overhandling of the nerve causing physical damage or thermal damage through the overuse of cautery in the vicinity of the nerve. Therefore, once the facial vessels are identified, ligated, and transected at the inferior border of the mandible, the suture materials used to ligate them (60 linen) at the superior end are cut ~5 cm in length with a snap attached to them. These snaps are thrown toward the cranial end of the patient, which will form a loop of the vessels, engulfing the nerve and thus protecting it from physical or thermal damage (Fig. 1B). At the end of the operation, the snaps are removed and the suture material cut to the usual size of 1–2 mm.

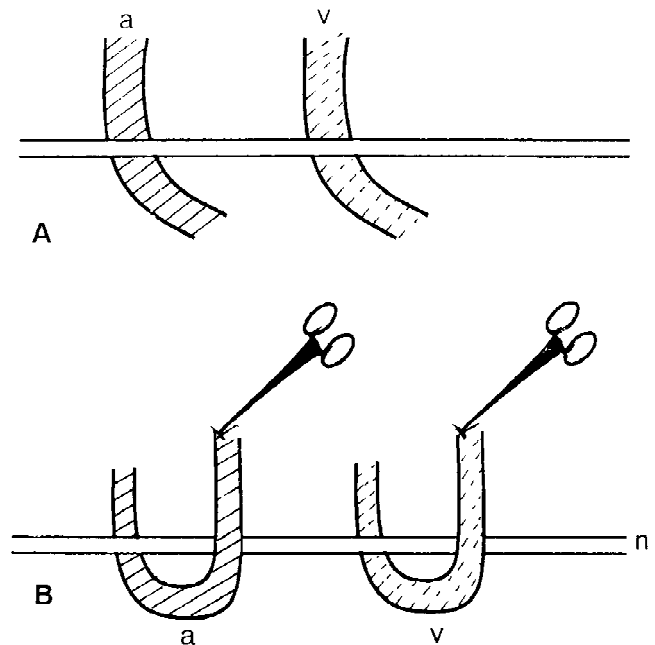


Fig. 1. Diagrammatic representation of: (A) Marginal mandibular nerve crossing the facial vessels; (B) protective loop formation of the facial vessels around the nerve; (a) facial artery; (v) facial vein; (n) marginal mandibular nerve.

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